Structherm
STRUCTURAL INSULATED FACADES

Facade Insulation Fixings

RAWLPLUG®

MBA-SS Stainless steel facade fixing

Fire-resistant stainless steel insulation fixing.

Product information

Features and benefits

- Metal facade fixing, recommended for use when fire resistance (F120) is a requirement
- Stainless steel material for high corrosion resistance
- Fast and simple hammer-set installation reduces working times.
- Extensive dimensional range allows anchorage of insulation boards up to 250mm thick
- Accessory spreader plate, MKC-SS (85mm diameter) also available for installation of soft insulation materials such as mineral wool

Applications

- Mineral wool (MW) boards
- Glass wool
- Lightweight wood wool building boards
- Lightweight recycled panels
- Polystyrene (EPS) boards
- Polyurethane (PU) boards

Base materials

Approved for use in:

- Concrete C20/25-C50/60 (Use category A)
- Solid Brick
- Solid Sand-lime Brick
- Aerated Concrete Block

Installation guide

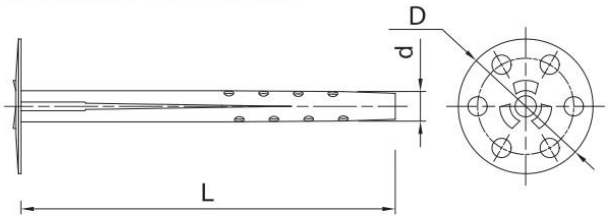
1. Drill a hole of required diameter and depth
2. With a hammer, lightly tap MBA fixing (with MKC washer where applicable) through the insulation material into hole, until fixing depth is reached.

Structherm
STRUCTURAL INSULATED FACADES

Facade Insulation Fixings

RAWLPLUG®

Product information



Size	Product Code	Fixing			Fixture
		Diameter	Length	Plate diameter	Max. thickness
		d	L	D	t_{fix}
		[mm]			
Ø08	MBA-SS-08090	8	90	35	40
	MBA-SS-08110	8	110	35	60
	MBA-SS-08140	8	140	35	90
	MBA-SS-08170	8	170	35	120
	MBA-SS-08200	8	200	35	150
	MBA-SS-08250	8	250	35	200
	MBA-SS-08300	8	300	35	250

Installation data

Substrate			A, B	Vertically perfo-	Sand-lime hollow	Aerated concre-
Hole diameter in substrate	d_0	[mm]	8	8	8	-
Min. hole depth in substrate	h_0	[mm]	30	60	40	-
Min. installation depth	h_{nom}	[mm]	35	50	30	50
Min. substrate thickness	h_{min}	[mm]	80	80	80	80
Min. spacing	s_{min}	[mm]	75	75	75	75
Min. edge distance	c_{min}	[mm]	75	75	75	75

Basic performance data

Performance data for single anchor without influence of edge distance and spacing

Substrate		Concrete	Solid brick	Sand-lime solid brick	Vertically perforated block	Sand-lime hollow brick	Autoclaved aerated concrete
Effective embedment depth h_{ef}	[mm]	30	30	30	50	30	50
MEAN ULTIMATE LOAD N_{Rum}							
MBA-SS	[kN]	1.05	0.80	0.90	0.40	0.50	1.05
CHARACTERISTIC LOAD N_{Rk}							
MBA-SS	[kN]	0.90	0.60	0.75	0.22	0.37	0.82
DESIGN LOAD N_{Rd}							
MBA-SS	[kN]	0.36	0.24	0.30	0.09	0.15	0.41
RECOMMENDED LOAD N_{rec}							
MBA-SS	[kN]	0.26	0.17	0.21	0.06	0.10	0.29

Structherm STRUCTURAL INSULATED FACADES

Facade Insulation Fixings

RAWLPLUG®

Design performance data

Size

Characteristic Resistance under fire exposure in concrete C20/25 to C50/60

Size			
TENSION LOAD			
Edge distance	c_{cr}	[mm]	100.00
Spacing	s_{cr}	[mm]	200.00
R (For EI) = 30 min			
TENSION LOAD			
PULL-OUT FAILURE			
Characteristic resistance	$N_{Rk,p}$	[kN]	0.22
R (For EI) = 60 min			
TENSION LOAD			
PULL-OUT FAILURE			
Characteristic resistance	$N_{Rk,p}$	[kN]	0.22
R (For EI) = 90 min			
TENSION LOAD			
PULL-OUT FAILURE			
Characteristic resistance	$N_{Rk,p}$	[kN]	0.22
R (For EI) = 120 min			
TENSION LOAD			
PULL-OUT FAILURE			
Characteristic resistance	$N_{Rk,p}$	[kN]	0.18

Product commercial data

Size	Product Code	Fixing			Quantity [pcs]			Weight [kg]			Bar Codes
		Diameter [mm]	Length [mm]	Plate diameter [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
Ø08	MBA-SS-08090	8	90	35	250	250	12000	4.1	4.1	224.6	5906675049885
	MBA-SS-08110	8	110	35	250	250	12000	4.5	4.5	247.5	5906675049892
	MBA-SS-08140	8	140	35	250	250	9000	5.4	5.4	223.5	5906675049908
	MBA-SS-08170	8	170	35	250	250	9000	6.8	6.8	275.0	5906675049915
	MBA-SS-08200	8	200	35	250	250	9000	7.3	7.3	291.3	5906675049922
	MBA-SS-08250	8	250	35	125	125	6000	4.5	4.5	247.6	5906675049939
	MBA-SS-08300	8	300	35	125	125	6000	5.3	5.3	285.0	5906675049946
Ø90	R-KFS-90/20				1	15	100	0.25	3.8	55.0	5906675475127